Daily Diary Report by Bid Item

Contract No.: 04-0120F4
Diary #: 053 **Const Calendar Day:** 197 **Date:** 24-Mar-2010 **Wednesday**
Inspector Name: Brignano, Bob **Title:** Transportation Engineer
Inspection Type:
Shift Hours: **Break:** **Over Time:**
Federal ID:
Location:
Reviewer: Schmitt, Alex **Approved Date:** **Status:** Submit

04-0120F4
04-SF-80-13.2/13.9
Self-Anchored
Suspension Bridge

Weather

Temperature **7 AM** **12 PM** **4PM**
Precipitation **Condition**

Working Day ☑ If no, explain:

Diary: Dispute ☐

General Comments

ITEM 52 FURNISH STRUCTURAL STEEL (BRIDGE)(TOWER);
ITEM 55 FURNISH STRUCTURAL STEEL (BRIDGE)(BOX GIRDER);

HIGH STRENGTH FASTENER ASSEMBLY PRE-INSTALLATION TESTING:

For ABF, engineer Chris Bausone is present. For CT, Bob Brignano and Saman Soheilifard are present. Work happens at Bolt Testing Conex ABF ID 002079 in the warehouse.

From 1000 to 1100, ABF tests A325 inch series bolts in drill and tap holes with the Skidmore Model HT 4000 ABF ID 000612. This requires putting a putting a plate with drill and tap holes behind the Skidmore pressure plates. This is ABF testing that is not witnessed by CT. ABF is checking that the test setup can be arranged for testing bolts in drill and tap holes with a Skidmore to record tension and also getting test results for clamping force. This is necessary because of an issue with the Tower Head where some bolts will be tightened into drill and tap holes and there is discussion about the need for fully tensioned bolts with the full clamping force to achieve a slip critical connection. ABF's tests this morning are for discussion in meetings on the Tower Head.

From 1100 to 1200, sample and test 2 rocap lots with the Skidmore Model HT 4000 ABF ID 000612. These are bolt assemblies that were furnished from LeJeune Bolt Company to ZPMC, then ZPMC didn't use these bolt assemblies because some bolted elements have been changed so that they will be bolted in the field instead of in the shop, so ZPMC shipped the bolt assemblies to ABF. These are bolt assemblies that have been previously tested and released by the CT Translab for use on the job and are just being used in a different location (bolt in field instead of in shop). We examine the bolt assemblies that are still in the original containers from LeJeune Bolt Company to ensure that they are still in good shape (bolt kegs not leaking and lubricant affected) and are properly labeled. Because these bolt assemblies have not been tested on site for rotational capacity, minimum tension verification, and inspection torque, this testing happens today.

From 1330 to 1600, sample and test 3 rocap lots for inspection torque by turning from the bolt head. A manual Skidmore Model MS ABF ID 000167 is used with painted steel plates introduced to represent the same friction surfaces as the field splices. For this testing, a calibrated torque wrench is used where appropriate and necessary to get a torque value, but for other portions of the manual test procedure, a clicker torque wrench is used for the testing to avoid overusing the calibrated inspection torque wrench and because the clicker torque wrench has a ratchet. Clicker torque wrench ABF ID 001451, 3000 ft-lb dial torque wrench ABF ID 001276, and 1000 ft-lb dial torque wrench ABF ID 003160 are used for today's testing.

See the attached Bolt Test Forms for details of the testing.

TORQUE WRENCHES:

ABF recently purchased one new torque wrench. ABF engineer Chris Bausone and I go over the supplied documentation and verify the calibrations are acceptable for this torque wrench. ABF will provide all the calibration documents for all the torque wrenches on site and put together a log of the torque wrenches.

ABF also plans to buy two new torque wrenches to replace ABF's two previously purchased clicker-type torque wrenches that we will not allow to be used for inspection torque. See Category A comment number 10 in State Letter 05.03.01-005472 dated September 15, 2009 for past history on this issue. As discussed at that time, the purchase price of these two replacement dial torque wrenches may be billed under the force account CCO 91. The initial calibration, if not included in the purchase price, is also covered by the CCO, but future yearly calibrations and any future repairs that may be necessary will not be compensated under CCO.